

The Missouri Department of Transportation's St. Louis Metro District maintains almost 6,000 lane miles of highways in the region. Because many of those highway miles pass very close to residential homes, many people are directly affected by highway noise. MoDOT does study sound levels near affected homes and will install a sound wall if it is warranted.

WHY build sound walls?

The Federal Highway Administration (FHWA) requires MoDOT to complete a sound study any time it plans to add through lanes to an existing highway or change the location of a road. Sound walls can help lessen the noise impacts of the roadway improvement and provides noticeable sound reduction for houses closest to the highway. They do this by providing a barrier between houses and highway traffic. Communities are eligible for a sound wall only if noise levels are at 66 decibels or above. A sound wall can reduce noise levels from five to 10 decibels.

WHEN does MoDOT get involved in sound wall construction?

MoDOT considers constructing sound walls as part of new road construction projects or in cooperation with cities and counties.

New Road Construction

MoDOT will provide noise reduction whenever through lanes are added or there are changes the alignment of a roadway.

Criteria For New Road Construction Projects

- The sound wall must reduce noise levels by at least five decibels for all benefitted homeowners.
- The sound wall must benefit more than one homeowner.
- The sound wall must be 18 feet or less in height.
- The sound wall must not pose a traffic safety hazard.
- The majority of the benefitted residents must agree that a sound wall is desired.

Cooperation With Cities And Counties

MoDOT will also provide noise reduction near existing highways, with the cities and counties participating in the cost of the design and the construction of the wall.

Criteria For Cooperative Projects

- The noise reduction must meet all of the new road construction criteria.
- A local government entity must request the project and show a commitment to carry it through to completion. The majority of the benefitted residents must agree that a sound wall is desired.
- Any required adjustment to the existing highway will be considered part of the cost of the project.
- The local government agency must provide 50 percent of the design and construction cost. MoDOT will provide the 50 percent matching funds. If the construction cost of the sound wall project exceeds \$30,000 per benefitted resident, the local government agency must pay 100 percent of the cost above \$30,000.
- Although not required, MoDOT and the local government agency will work with East-West Gateway Coordinating Council for inclusion in MoDOT's Transportation Improvement Program (TIP).

☞ If the project does not qualify as a cooperative project, the sound wall may still be built on MoDOT property if funded entirely by the local government.

WHEN will a sound wall get built?

When all of the criteria of new road construction or cooperative projects are met, a sound wall must then meet all noise reduction criteria in order to get built. These criteria include sound reduction, cost and resident approval.

Sound Reduction

A community would be eligible for a sound wall if noise levels are at 66 decibels or above. As a point of reference: 65 decibels is equal to the sound of normal conversation from three feet away; 70 decibels is equal

to the sound of a vacuum cleaner 10 feet away; and 75 decibels is equal to the sound of someone shouting three feet away. A sound wall must reduce noise for an affected home by at least five decibels.

Cost

A sound wall cannot exceed \$30,000 per benefitted home. For a new roadway project, 20 percent comes from the state and 80 percent comes from the federal government. For a cooperative project, 50 percent comes from the local government agency and 50 percent comes from the state government agency.

Resident Approval

Just because there may be unacceptable noise levels does not mean a sound wall will automatically be built. Before detailed design begins on the wall, the residents will be contacted to determine if a majority of the affected homeowners desire a sound wall. If so, MoDOT will then begin design of the wall. After the wall is designed, MoDOT will contact the residents again to give them more detailed information about the wall. At that time, residents can offer input as to the appearance of the wall, including concrete, brick, and concrete block. MoDOT will use that input to decide what the wall will look like and complete the final design of the wall.

WHERE are sound walls typically located?

MoDOT's first choice is to locate a sound wall along a highway fence and as far from highway traffic as possible. Sound walls close to the highway create a safety hazard to motorists, especially for those motorists who need to stop on a shoulder. MoDOT will only consider locating a sound wall along the highway if it will not work along the fence.



Questions?
Call 1-888-ASK-MODOT
(2 7 5 6 6 3 6)

Frequently Asked Questions

Q *Why are you building sound walls? You could be spending that money on the roads.*

A It's a package deal. MoDOT always looks at the environmental impacts of our roadway projects and at all alternatives that will minimize those impacts. Sound walls are a way to minimize the increased noise that comes with increased driving lanes. MoDOT always to be a "good neighbor" to those people affected by highway projects. MoDOT would also lose federal funding if it did not look at the environmental impacts of its projects.

Q *Why do some areas get sound walls and others don't?*

A A sound study is done whenever MoDOT adds through lanes or changes the alignment of a roadway. We can only build walls in those locations where all the sound reduction criteria are met. It would be irresponsible for MoDOT to build walls that don't meet the criteria.

Q *What can I do to get a sound wall?*

A Please contact MoDOT toll-free at 1-888-ASK-MODOT. Someone will work with you to see if you qualify for a sound wall.

Q *Why can't you just plant some trees instead of building a sound wall?*

A Landscaping as a form of sound abatement is just not feasible in the St. Louis area. A group of trees would have to be at least 100 feet thick and very dense to provide the 5 decibel reduction necessary to be classified as sound abatement.



**St. Louis Metro District
Missouri Department of Transportation
1590 Woodlake Drive
Chesterfield, MO 63017
(314) 340-4100 or 1-888 ASK MODOT
www.modot.org**

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Soundwalls

A look at why, when, & where



Missouri Department of Transportation